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10/540,573	06/24/2005	Naoki Kobayashi	016778-0498	6434

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FOLEY AND LARDNER LLP  
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EXAMINER
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HUANG, WEN WU

ART UNIT	PAPER NUMBER
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2618

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07/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### **ADVISORY ACTION**

Applicant's arguments filed 5/19/08 have been fully considered but they are not persuasive.

Regarding claim 1, the Applicant argues that Ohara merely feeds RF signals to the antenna and Ohara is silent to teaching feeding power to the antenna. However, the Examiner respectfully disagrees.

More specifically, the Examiner submits that the RF signals of Ohara reads on the power of the instant invention. The Examiner submits that Examiner's interpretation is reasonable and consistent with the Specification of the instant application. The Specification of the instant application recites:

“[0036] The casing accommodates a printed circuit board (not shown), and has a transmission section for supplying transmission power, a power transmission section that transmits the power to the antenna, and a power amplifier that amplifies the power on the circuit board. The transmission power is generally sent from the output terminal of the power amplifier to the antenna 16 via a feeding section.”

Thus, the Examiner submits that it is clear from the above paragraph that the antenna in the instant invention is a passive antenna and the power in the instant application is referring to the RF signal power.

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Regarding claim 13, the Applicant argues that Wong does not teach an antenna is mounted on a lower end of the lower casing on an outer surface of the lower casing. However, the Examiner submits that, as cited on page 14, lines 1-2 of the Final Rejection dated 2/20/08, Fehrm teaches an antenna is mounted on a lower end of the lower casing on an outer surface of the lower casing (see Fehrm, fig. 1, component 11).

Furthermore, the Applicant argues that Wong does not contemplate a different disposition of his antenna mounted on the outer surface. However, the Examiner respectfully disagrees.

More specifically, the Examiner submits that Wong explicitly teaches that a separate antenna 20 mounted on the outer surface may be employed (see Wong, fig. 1, col. 2, line 52). Thus, the Examiner submits that it is incorrect to assert the any modification of the antenna of Wong would still be totally encased within the housing of the mobile telephone.

In addition, the Applicant argues that Wong and Fehrm cannot be combined because Wong's invention and Fehrm's have different purposes. In response to applicant's argument, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Regarding claim 16, the Applicant argues that Ohara does not teach or suggest two different connections of his antenna.

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However, the Examiner submits that Claim 16 requires a single antenna configured to be coupled to EITHER a back surface of the upper casing OR a front surface of the lower casing. The Examiner submits that Claim 16 does not require the antenna configured to be coupled to both the upper casing and the lower casing.

Thus, the Examiner submits that the combination of Harano, Bickert and Ohara teaches the limitation of claim 16.

Amended claim 1 is rejected as following:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harano (US PUB NO. 2002/0142794 A1) in view of Bickert et al. (US. 5,907,307; hereinafter "Bickert") and Ohara et al. (US. 6,661,391 B2; hereinafter "Ohara")

Regarding **claim 1**, Harano teaches a portable telephone (see Harano, fig. 8) comprising

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an upper casing (see Harano, fig. 8, component 21) provided with a speaker (see Harano, fig. 8, component 25) and a display screen (see Harano, fig. 8, component 26) and a lower casing (see Harano, fig. 8, component 22) on which a keyboard is disposed (see Harano, fig. 8, component 23), wherein an antenna is mounted on an upper end of the upper casing (see Harano, fig. 8, component 23).

Harano is silent to teaching that wherein a dielectric member with a predetermined dielectric constant and little loss is mounted on a back side of the antenna such that the back side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member and such that the dielectric member is positioned farther away from a head of a user than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone,

wherein the antenna includes a joint provided at one end of the antenna that is coupled to the upper casing,

wherein the antenna is integrally coupled with the dielectric member,

wherein the joint operates as a feeding section for feeding electricity supplied by the portable telephone to the antenna, and

wherein the joint corresponds to a feeding section that feeds power to the antenna from the portable telephone when the antenna and the dielectric member are coupled together. However, the claimed limitation is well known as evidenced by Bickert and Ohara.

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In the same field of endeavor, Bickert teaches a portable telephone (see Bickert, fig. 3) wherein a dielectric member (see Bickert, fig. 2, dielectric object 12, col. 11, lines 60-67) with a predetermined dielectric constant and little loss (see Bickert, col. 12, lines 38-41) is mounted on a back side of the antenna (see Bickert, fig. 2, antenna 10) such that the back side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member (see Bickert, fig. 2 and 3, dielectric 12 covers antenna 10) and such that the dielectric member is positioned farther away from a head of a user (see Bickert, fig. 2, head 14) than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone (see Bickert, fig. 4, col. 12, lines 54-57),

wherein the antenna is integrally coupled with the dielectric member (see Bickert, fig. 2, dielectric object 12 and antenna 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano with the teaching of Bickert in order to re-direct harmful radio electromagnetic wave energy away from the user's head (see Bickert, col. 2, lines 45-48).

The combination of Harano and Bickert is silent to teaching that

wherein the antenna includes a joint provided at one end of the antenna that is coupled to the upper casing,

wherein the joint operates as a feeding section for feeding electricity supplied by the portable telephone to the antenna, and

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wherein the joint corresponds to a feeding section that feeds power to the antenna from the portable telephone when the antenna and the dielectric member are coupled together. However, the claimed limitation is well known in the art as evidenced by Ohara.

In the same field of endeavor, Ohara teaches a portable telephone (see Ohara, fig. 9, mobile phone 26),

wherein the antenna includes a joint provided at one end of the antenna (see Ohara, fig. 3, col. 5, lines 5-12, antenna 11, feed metal fitting 14 and bottom end 13A) that is coupled to the upper casing (see Ohara, fig. 9, casing 27),

wherein the joint operates as a feeding section for feeding electricity supplied by the portable telephone to the antenna (see Ohara, fig. 9, col. 6-13, feeder 28), and

wherein the joint corresponds to a feeding section that feeds power to the antenna from the portable telephone when the antenna and the dielectric member are coupled together (see Ohara, fig. 9, col. 6-13, feeder 28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Ohara in order to high reliable and cost effective antenna for mobile phones (see Ohara, col. 2, lines 34-44).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN W. HUANG whose telephone number is (571)272-7852. The examiner can normally be reached on 10am - 6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. W. H./  
Examiner, Art Unit 2618

/Matthew D. Anderson/  
Supervisory Patent Examiner, Art Unit 2618